

CLAIMS

1. A printing data processor comprising:
 - an editing process part for receiving printing data in the form of a page description language from a host and editing the received printing data in a form intermediate between the form of a page description language and a printable bit image form;
 - an intermediate-form printing data memory for storing printing data of said intermediate form; and
 - an expansion process part for expanding printing data of said intermediate form to the bit image form,wherein said editing process part includes a register process part for analyzing printing data of said intermediate form edited page by page and adding page state data of each page to printing data of said intermediate form edited page by page.
2. A printing data processor according to Claim 1, the editing process part further includes a decoding process part separating printing data from the host command by command, and a command process part performing preprocessing to each command from the decoding process part.
3. A printing data processor according to Claim 1, wherein said printing data of intermediate form is printing data expressed in a display list form.
4. A printing data processor according to Claim 1, further comprising a readout part for reading said page state data to control a printing operation according to said page state data added to said printing data held in said

register process part.

5. A printing data processor according to Claim 1, wherein said editing process part includes a page state storage area to which said page state data detected by said register process part is sent page after page, and wherein final page state data of each page stored in said page state storage area is added to printing data of said intermediate form.

6. A printing data processor according to Claim 1, wherein said page state data added to printing data of said intermediate form is of the same intermediate form as printing data of said intermediate form.

7. A printing data processor according to Claim 1, wherein said expansion process part includes a plurality of usagewise-separated register process parts for respective reproduction modes of respective pages, and a selection process part for selecting a usagewise-separated register process part suitable for said page state from said plurality of usagewise-separated register process parts according to said page state data.

8. A printing data processor according to Claim 7, further comprising a system management part for deciding timing of expanding printing data of said intermediate form to printing data of said bit image form, and a bit image printing data memory for storing printing data of said bit image form,

wherein said system management part decides the amount of memory used to expand each piece of printing data of said intermediate form to printing data of said bit image form for each page according to said page state data at printing on both sides or at printing of multi-page copies, and selectively stores

printing data in said intermediate-form printing data memory and in said bit image printing data memory according to the amount of memory used.

9. A printing data processor according to Claim 8, wherein said system management part, when making a decision that the amount of memory used with printing data of said intermediate form is relatively large, stores said printing data in intermediate form in said intermediate-form printing data memory, and when making a decision that the amount of memory used is relatively small, stores said printing data, expanded to said bit image form, in said bit image printing data memory.

10. A printing data processor according to Claim 7 or 9, further comprising a printing speed decision part for changing the printing speed of pages printed continuously, wherein said printing speed decision part decides the printing speed of pages printed from the page state of a page to be printed and from the page state of another page immediately afterwards according to a predetermined decision rule.

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